

1899

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700

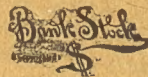


## the people

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The American Bank Stock Co.  
OFFICE AND WAREHOUSE  
22 CLAY STREET, S. F.

Price 5 Cents

1898 /

Oct 30-

Started at 3:10 P.M. against a strong S.W. wind. Outside the wind ~~fell~~, Remained near the ~~fallows~~ <sup>10:12 PM.</sup> all night.

31- Good N.W. wind at 2.00 A.M. Got sick at midnight remained so all day. Made about 8 knots. Leak inudder lost prevented use of main sail.

November

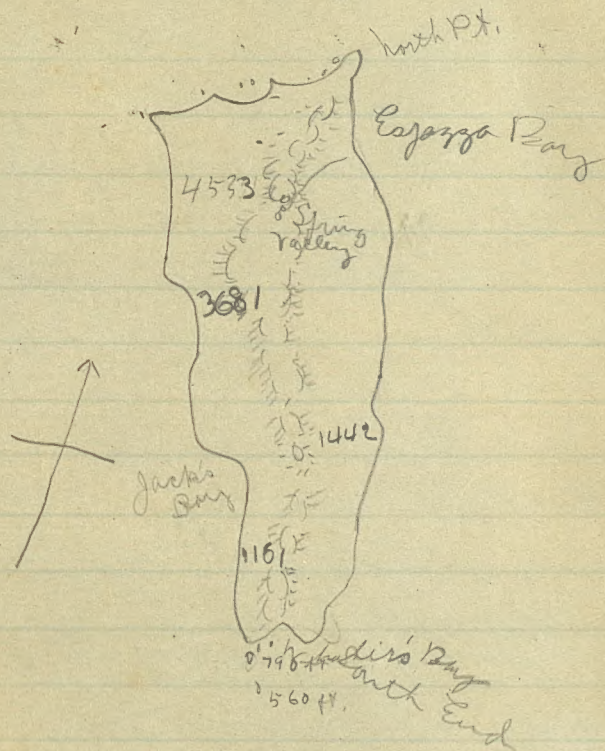
- 1- Got on my sea-legs. Wind favorable, made about 6 knots with the present. A black-footed albatross has followed us for two days.
- 2- At 8:30 A.M. a Burrowing Owl came on board & perched on the bowsprit. Captain climbed



out to catch it but it flew  
away westward. Wind  
changed to N.W. light breeze  
about 2 knots. Remained  
about 1.00 mi off shore + latitude  
of San Clemente. Five gannets  
stayed with the ship all day.  
Several Snowy Plover + a few  
Pied-billed Grebes at night. A  
large sunfish + a whale  
were seen.

- 3 A horned Lark <sup>or Pigeon</sup> came near  
this morning. Wind light  
from the north. A fulmar  
followed us in the morning.  
4. Wind light westerly, at daybreak  
reached north end of Guadalupe  
Island. Wind very light, calmed  
all day before reaching south end.  
Gannets left us at N. end of  
Island. One sea bird seen

### 3 Guadalupe



about the island. Skuas,  
agulls + a cormorant. Sees  
very picturesque + wild in fig.  
a few small cooters observed +  
a large of oaks at N. end,  
on extreme summit. Sailed  
one large Salpa + several strings



of Salpa like forms. Strings  
were very abundant of all  
lengths from 6 in - 4 ft.

5. Went on shore & walked from  
the S. end to the center. Shot  
9 Rock Wrens which were the  
most abundant birds seen.  
3 House Finches were shot &  
2 Tattlers. One of Sparrow  
Hawks was seen & several  
Gulls. Clostridium abundant,  
Abalones, Callistoma, Acorn  
& Key hole limpet. No  
echinoderms or barnacles  
seen. The marine fauna  
seemed to be characterized by  
what it lacked. Only one  
species of algae seen. Tide zone  
fishes fairly common. Many  
hair seal seen. Capt. caught  
a box turtle from the

5  
stem of the schooner. Most of  
the island was covered with  
lava fragments size of cobble  
stones. These were covered with  
various lichens, most a  
yellow species, one inch long & a  
iridescent deep red species.  
A shrubby composite was in bloom.  
Two species of cactus, a long  
tree like form & a globular  
species a inch or so in diameter  
with long red fruit. Vegetation  
very scanty, some fox tail  
grass. About a dozen Angora  
Goats were seen. I shot  
3 ♂ & 1 ♀. Found pills of a large <sup>cricket</sup> ~~cricket~~ <sup>cricket</sup> ~~cricket~~  
under some stones.  
6- Left Guadalupe this  
morning. No Boobies seen.  
A few flying fish & a porpoise  
observed.  
7- Head calm until about



2.00 P.M. Several Boon, Yellow  
billed Tropic birds & Martin's fish  
came about. One or two  
skinkers or Frigates seen.  
8. Day beautiful. Wind  
very light. No birds or fish seen.  
Bek-ford's albatross & Boon's before  
us at N. end of Guadalupe.  
were not seen south of that  
point.

9. Saw one Phallion, many  
small flying-fish about  
4 inches long. Several schools  
of black fish (small whales).

Latitude about  $22^{\circ}$  Wind light.

10. Shot a Man of War Bird this  
A.M., *Fregata aquila*, it was  
a juv. ♂, stomach contains  
carcass of a flying fish.  
Got 2 species of malopha & one  
large fish. Saw many small

7  
flying fish. Wind light northerly.  
11. Tropic Man of War Birds common  
this A.M. Caught two flying fish,  
*Halargyllus evolans*, during the  
night which flew on deck. Have  
seen this species commonly since  
leaving Guadalupe. A large white  
Boby seen this P.M. A large  
school of porpoise played about  
the bow this morning. Wind  
light northerly. Made about 105  
knots.

12. Many *Sula cyparissia* &  
Tropic birds seen, also auklets  
& petrels. Few flying fish. A  
school of Skippers *Sarda chilensis*  
played about the bow but  
would not take the hook. Read  
clear in the morning but  
struck strong NW wind in  
evening. Passed Clarion Is.



about 12 P.M. 5 miles to  
westward.

13 Fair W. W. Wind. Keeping  
7 knots all day, in  
the morning when we  
were about 30 miles off  
Clarion Is. we were visited  
by many *Sula cyanops*  
but secured only one ad. g.  
although others were shot  
over the water. Many Man  
birds were also common & a  
small auklet like bird.  
The Man o' War bird contained  
mandibles for squid & some  
green algae. The Booby was  
empty. In the P.M. ran  
into a large school of  
porpoise for a couple hours.  
Harford & I made a sketch.  
The porpoise were accompanied

9

by large flocks of *Sula cyanops*  
probably to secure part of the  
fish which the porpoise  
brought in fishing. A red-  
billed Tropic bird came over  
the schooner. Very few  
flying-fish seen.

14 Fair flying fish came  
aboard during the night.  
One large *Exocoetes volitans*  
secured, others all *Halargyreus*  
*volitans*. Boobys, Red-billed  
Tropic Birds, Frigates, etc.  
common. Wind fair, 180 knots.

15 Showers frequent during  
the night accompanied by  
lightning. Calm in the  
morning with light S.W.  
breeze. No flying fish seen.  
A small species of skink  
seen with silver spots on its back.



bands, tail very short, mouth  
 compressed, *Carcharias* 4  
 Hg of Anal 90 70 mm  
 1st Dorsal 65 mm  
 Lg 112 mm  
 Tail up. lobe 440 mm  
 Low " 200  
 1/2 Pectoral 365  
 Base " 110  
 1/2 1st Dorsal 240  
 Base " 170

Caudal notched near  
 end of 1st lobe.  
 Pectorals rounded at  
 tip, no falcate. Coloration  
 dark, lighter at tip of fins.  
 Above body dark, blackish,  
 whitish about mouth & under  
 of snout, also between ventral  
 anal. dark on rest of  
 underparts.

11

Snout from mouth 100 mm  
 Width of " 140  
 Snout to pectorals 310  
 " " pelvic 740  
 " " anal 920  
 " 1st dorsal 460  
 " 2nd " 940  
 Depth of Body 250  
 Height of Pelvic 100  
 Base " 70

I have found a new species  
 of *Carcharias* today.  
 Stomach empty, mouth  
 contained broken part of a  
 shell which looked like a  
 paper nautilus. Caught a  
 great many small ones  
 during the chase which  
 prevailed all day. One large  
*Ctenophore* *Boreia* taken  
 many small water spiders



or *Hydrobatidae* caught  
with the hand net, also a  
egg flying fish about 1 cm long.  
A school of Albacore &  
Porpoise seen this AM.

17 Dead calum with a few  
showers. *Sula* & *Phaethon*  
*Petrel* etc observed. A large  
sword-fish seen. No medusa  
or *Hydrobatidae* seen today.  
On the 14 began to see *Sula* in  
which the back was dark colored  
like the wings & which had a  
dark pectoral band. Appeared  
larger than *S. cyanopt.* Shanks  
caught on 16 had 3 *Remora*  
*remora* attached.

18 *Styralia*, no progress

19 Same as above

20 " " "

21 Very calm, caught

several *Porpita pacific* also  
many medusae visited by  
many terns from  
Clifferton.

22<sup>23</sup> Arrived at Clifferton about  
noon. Caught a large albacore  
a horse mackerel as we  
entered the anchorage. Many  
porpoise of a species different  
from the one we caught  
there seen, they were smaller  
with very short beaks  
snouts. One seen washed  
up on the beach as we  
landed. Went ashore in  
the afternoon & remained  
during the next day.  
As we landed the whole  
island was covered with  
large orange land crabs that  
lived in holes in the coral.



sand. The crabs live upon  
the dead birds or any refuse  
they can find. No vegetation  
is found upon the land  
because of these crabs. Two  
coconut palms & a small  
garden has been planted by  
the Co. but these had to be  
guarded from the crabs.  
Two species of boobies were  
mixed through the whole  
island & held possession  
everywhere except upon  
a few islands in the lagoon.  
The white species much  
the commoner. The birds  
were paired, i.e., white sp.  
& a few were sitting on a  
single egg only 2 sets of 2  
were secured. Mr. Arnold  
the Vice President of the Co.

15  
who was visiting the islands  
informed us that only  
one egg was reared the other  
being left to starve on account  
of the extreme voracity of  
the young. Two distinct  
notes were heard a short  
sharp whistle & a loud  
quack. The eggs are fed by  
their parents for nearly a  
year & until they are as large as  
the adult. They are fed by  
disgorged fish & are continually  
seen attempting to open the  
parent's mouth with their  
bills. Two species of  
terns were abundant, a  
brown & a white-bellied forked  
tail species. The latter were  
breeding in countless hundreds  
on the small islands in the



Lagoon. At one end of the island the eggs were just being incubated, at the other end they were already hatched. The egg being covered with tan. Another stacked down, not hatched like a egg quail. Only one or two set of two were seen all the others being of one. For the eggs of the brown sp. were taken from this colony, where they were seen about the edge of the island but only three were nesting. One white tern was seen at night on a house but not secured. A wing was secured from Mr. Shephard. A single swallow was seen but not secured.

The rocks were inhabited by boobies Brown Terns & Man of War Birds.

The egg boobies are covered at 1st with white down when about grown they are purplish brownish with bluish bill & feet. They take their first lesson in swimming in the lagoon & also in catching fish. About 12 Eumeces were taken at the rocks, they were abundant on the sides of the rock, in the sunlight, they waded through small pools of water eating ungraciously. We bunched them down with our hats. There were none on the shady side of the island. Several small Gobiids were shot in the



Lagoon, where they were  
very abundant near the  
edge in shallow water.  
They lay flat on the bottom  
at low tide. The rocks with  
them were much resented.  
The Lagoon was covered  
in places with seaweed  
green plants, some brown  
algae & some species of grass  
Hammocks. They heads of  
leafy plants were much  
seen in the water beneath the  
surface. The water was  
only very slightly yellow.  
When the rocks along  
shore were many and large,  
earthworm & gray crabs.

were extremely abundant,  
A large gray sand covered  
species of black slender  
species found under the  
rocks. Fish were extremely  
abundant. Many small  
fish greatly compressed  
were seen. Several also  
also a few of black, blue  
stripes. One also a specimen  
like that in the lagoon.

24 Left Chipewton about  
9.00 Am. Fair easterly breeze  
25-29 Winds variable, light



Many small bonitas  
seen, no flying fish.  
*Sterna f. lignosa* occasional  
*Fregata* & *Phaethon* seldom  
seen. *Sula* sp. 3. *Clif.* common.

Clifferton birds -

Fazgon - Robins separator  
Wing - *Eudynamis* - sp.  
different in fin shape from  
any description.

Puffers -

Birds - *Sterna f. lignosa*  
*Centurus str. str.*

*Sterna f. lignosa*

*Sterna*

Black

*Sula* white

" Br.

*Fregata a. a. p. t.*

30: Saw pair of Wedge-tail, Cays  
Saw a red flying fish

December 21st

1 Caught many *Pterodroma*  
most of them were accompanied  
by a small fish which  
stayed just beneath them.  
*P. a. a. a.* common, two  
specimens one very small  
one large while remaining  
species.

3 Caught two small *Thunnus*  
*thynnus* both *Contarinus*  
many small fish, a small  
flying-fish & a sharp snout  
species. The *Thunnus* was  
as large as large, one caught  
at Clifferton. The middle  
fish was *Eudynamis* but  
species not in book. The small fish  
was *Halargyptus* *argyrops*.

4. Caught with a few others  
Capt. caught two just after flying  
fish were seen.



much. Many large eggs  
only a few with fish.

5. Strong S. wind. Broke out in  
the morning to see 12 birds, two  
two bird fed babies, one at  
with white back & black finches.  
Many brown backed, four  
large blue birds, one starling.  
One was seen together with many  
shovels with their dorsal fins  
out of water. One was seen.

Saw the white bird in the field  
at least 200 miles S. of the  
above. Greenish-gold, below  
yellow. Evenly green above  
on belly & throat spotted  
with purple as large as feet  
one inch apart. Dorsal  
fin yellowish above, yellow  
beneath. Dorsal fin purple  
with spots, ventral fins white.

beneath, blue green above,  
dorsal greenish, head yellowish  
iris black, feet golden

1 945, 10/22 190, 12 190  
1/2 dorsal 20 1/2 vent 132 1/2 vent 100

Dorsal Rays 56 Vent Rays 25

Feet also rays 17 Vent 1-5

1/2 dorsal 375. 1/2 vent 125

1/2 Anal 35, spin 60

1/2 Caudal 230 HK 200

Caudal peduncle L/7

Posterior fin below head, below

with eye, ventrals below

with 1/2 of ventrals, dorsal below

ventrals to anal

Spine to base 485 Spin to fin 100

Spine to end of vent 415

Spine to dorsal fin 275 Spin to

base of anal, dorsal

base of first dorsal fin,

1/2 dorsal fin to base of anal 160



11th gulf of Carib 3:05

6 Windy, S. S. Green-turtle.

7 A black palm tail tern  
about 1000 ft. high.

8 Rainy, interdict. Caught  
7/16. Green-turtle. Stomach  
contents contained a great  
quantity of the long footed  
Phrynosoma, also some  
medusa, a few crabs  
one white shrimp-like  
fish.

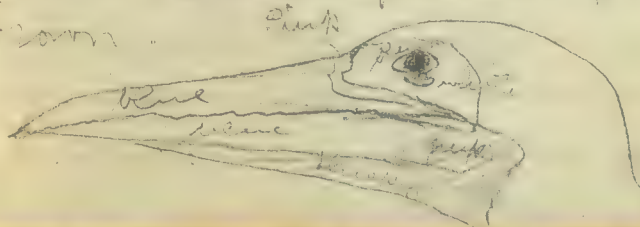
Like for me. About 1/2 of the  
candy and other food.  
Porphyria were seen, plenty  
by this time. Caught a small  
Thynnus which contained a  
very elongate fish, probably  
a acanthopterygian.

some preservation. I had  
seen Phyllon came  
near, the first seen since  
leaving Marion Is.

Culpeper.

Wh. Sea Bill pink, yellow  
at tip. Culmen pinkish dusky  
purplish, Iris yellow  
Feet in a blackish, with  
white spots. Vagabond  
brownish.

R. Seabird coral red.  
Bill light blue whitening toward  
tip. Base of lower mandible  
darker. Blue space above  
eye, lower, but white space.  
Culmen <sup>pinkish</sup> dusky. Iris deep  
brown.





Lee (a Culper) reached in the morning in the wind. Landed about 9 AM. Climbing the shallow slope the base of the cliff could be seen, the top being inaccessible. The common plant was - low shrubby, fine like grass with greenish inconspicuous flowers. A few bushes 6-8 ft high grew on the slope in which the red-footed boobies nested. A cucumber like vine with heavy, like fruit was also seen. A species of shrubby Leguminosa, *Prostratus* grew on the rocks of the cliff where water trickled down. Insects were not many species, few dragonflies, but a cricket, grasshopper,

under stones & grayish flies. A point centipede 6-8 inches long & 3/4 wide was found under a dead bird. Dead ones were common. Lizards, greenish with white spots, and covered with yellow spots were common along the shore. A small scorpion with a long tail which quivered from the rock by the sea was common in the tide pools. Sharks were very abundant. Also a large brown spotted fish. Birds were everywhere. The common land bird was a black goose, 12-14 in. long, brownish gray. A quail was also seen, a catbird was also common. Several yellow birds were seen on the rocks with the birds.



mistake & took badly. The  
commonest sea birds were the  
Fregata, egg was found every  
where singly, but in abundance  
came the white Sula nesting  
about as the Fregata but they  
had just begun some only  
sitting on one egg others depending  
nesting sites. The red-footed

Sula was much rarer & was  
only in the bushes on a flat  
of sticks. If marked or brown  
white. In eggs. Birds will  
not sit <sup>but will sit on egg</sup> only one egg in nest. Along  
the shore a slate colored red  
Gull common. One egg secured  
on top of black rock. A turnstone  
shot, one sandpiper seen.

Anous seen occasionally, many  
Sturna fuliginosa on land,  
but none on land.

Many cactus & sea bird nests  
seen all empty, possibly belong  
to Mesomachus. Island  
thickly covered on top with  
brush, cacti. Top of island  
a layer of soft sandstone about  
10-20 ft thick, below this a  
layer of basaltic columnar rock  
10-20 ft thick & underlying this  
again a layer of loose sandstone  
about as thick as that on top.  
Many small petrel & a kind  
of gull-like bird from basket  
of petrel & gull. Took three  
Puffin-like birds, one from  
rocks on the shore. The other  
two were in a hole containing  
much water. Silliman  
constant. One large cactus  
seen from shore. A small  
black bird like still &



Three species of *Pteris* found.  
Two species of *Utricularia*,  
one very minute & a  
*Carithidium*. None of the  
algae far advanced some quite  
little larvae. *Ceratomyxa* abundant  
*Smolyer* found in sitting in a  
pool. Also some *Hydrobia* & *Physa*.











[illegible]

several small birds. A few  
blackish ones were seen  
as common with the  
very least of which I found  
them like the *Phalaropus*.  
*Sterna* for *Phalaropus* *Phalaropus*  
and the *Phalaropus* *Phalaropus*  
and were seen on the land,  
a few *Phalaropus* *Phalaropus*  
seen about the island.  
There are not many  
birds in the *Phalaropus*  
*Phalaropus* species.

17- Stayed on the schooner today.  
Capt returned with about ten  
fur seal, a large green turtle  
& several Mysterica, one yellow  
one. A single shearwater egg  
taken from a cave. Caught  
7 blarks on the schooner, one ♀  
with 10 large eggs. Two ♂ eggs



preserved. They differ much  
in proportions from adults. The  
mouth is much narrower &  
snout much longer. Dorsal  
fin & pectorals of about same size  
while in adult pectoral much  
longer. All rest of fin strong  
of a one took a large squid &  
several fish, a large blenny but  
fairly decayed, a red perch &  
a blue black fish. <sup>also a common</sup> Caught some  
brown algae floating by with a  
species of greyish crab attached. Caught  
2 *Gym. sardina* off the lough,  
also many small chummers.  
Capt has now shot about 25 seal  
off Weeman.

19th Went with the Capt. sailing.  
Started in at the N.E. end &  
worked around north to the  
west. Killed about 48 seal.

Compositae

*Atriplex* & *Asplenium*.



















with their tail sticking  
up far out of water, others  
rolled over & over. The  
different from the black  
one had seen before. Their  
heads were perfectly round  
as bullet. A few eggs about  
long seen. In the evening  
a large whale came along.  
24. He was seen from 10 to 12  
miles. 27. The boat was  
27 had a small piece of  
back, probably a piece of  
whale. In looking over the  
side from Clipperton one of the  
men was seen observed to be  
the back of a large  
whale. This was believed  
in contradiction to those who  
believed that it was  
a species of whale.

found them that the boat  
was all up a year old or  
more. The eggs were found  
under brown ones, not very  
related; they all appeared  
the same.

27. Sighted Albermarle  
this morning. Heavy rain  
forecast during afternoon.  
About noon were 15 miles  
from Agoua one with  
harbour 15 miles from  
shore. The MS. at Agoua  
was a head of the  
egg about 100. Sighted  
the same. Heavy rain  
saw the top of  
the 3 craters in sight.  
Harbour the 4th is 16  
miles from the shore.



all night, wind rather to the  
 S.W. at 6:00 P.M., & light  
 rain & very heavy on S.E.  
 side, dry & barren on West.  
 heavy bank of clouds  
 extending continually on S.E.  
 side of mountain. Saw  
 several pairs of *Spheniscus*  
 near their hole, uttering  
 their peculiar loud harsh  
 sound. *Puffin* & *Prioniturus* seen.  
*Alcedo* observed. Puffin  
 & *Prioniturus* abundant about  
 the ship. A few *Alcedo* seen far  
 away. A few Red-billed  
*Alcedo* like those seen at  
 the pines. A few *Alcedo* seen  
 individually also seen far away.  
 A few *Alcedo* seen in low line  
 of beach about 100 yards from

rather strong with large breaking  
 backed by a blacker rock cliff  
 about 10 ft high, and in places  
 a sandy beach; sea rather  
 high. Back of beach are old  
 steep mounds with traces  
 of level base, not unlike  
 ancient beach cliffs. This would  
 go to show the island is an  
 old one. Very small  
 holes in the side of large crater,  
 mounted about 12 ft from shore  
 on one side. It is that place  
 where the clouds are often seen  
 covering the half of mountain  
 down to 100 ft level, this is  
 a high, marked on side of  
 rock. A small hole in the ground  
 about 10 ft from beach made by this  
 sort of clouds.







Croton

Croton  
~~flavescens~~ abundant, in  
abundant, a white

*Chionochloa* *Chionochloa* *Chionochloa*  
*Chionochloa* *Chionochloa* *Chionochloa*

Seawater

*Scorpaen* abundant  
*Albina* common  
*Leptocottus* common

*Sorbus*

*Souchus*

*Mangrove* common near  
beach, both on the island.

Placed upon my table  
 of Penicillium

Yellow-bellied Sapsucker

1. *Long-tailed Tit*, 1885  
 2. *Long-tailed Tit*, 1885

Small black figs, 5-6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842,

your father and I found the  
same old table.

Q but seen in some

March 2nd, 1860  
Farmington, Conn.



[illegible]

about 7 on beach, kept  
together then even  
formerly many dogs  
ran about the  
islands, kept by the  
whaler hunters. They  
live on kelp, fish etc.  
then the catch of the whalers.  
The whole rookery of Sable  
island is a small one.  
Capt. Elizabeth says  
last saw a band of about  
25 of all different species, some  
black, some, in the  
company of a white bear  
in the bay, near the  
island. The bear was  
black or all black, but  
for the most part.







Jan

61

for



Jan

Large corals, algae  
covered all rock. Many  
cave openings & brown algae  
3: Lays on the west side of  
Wartmouth all large. Heard  
small & ad. banding  
impossible. The island a few  
very barren, a great deal of  
it made up of barren lava  
streams, but there a few  
exposed banks, coral & coral  
North end quite steep. Few  
cinder cones on this side.  
Whales & hair seal seen abn &  
band, Frigate & Spheniscus  
Oceanodroma, Oceanites &  
Spheniscus common about  
ship.

*Georgina fuliginosa*

" *indica*  
" *parvula*

63  
Jan

*Macropygia variegata*

" (common)

" (common)

" *affinis*

*Macropygia* ~~indica~~ *indica*

*Macropygia* ~~indica~~ *indica*

*Macropygia* ~~indica~~ *indica*

4: Shot 2 Puffins from

bow of Schooner. Several

were seen. Storm petrels

common, which they were

briefly observed on the

long side of Schooner to

common. One red-billed

gull seen above ship.

One *Macropygia* ~~indica~~ *indica*

seen on the west side of

ship. One *Macropygia* ~~indica~~ *indica*

seen on the west side of

ship. One *Macropygia* ~~indica~~ *indica*

seen on the west side of

ship. One *Macropygia* ~~indica~~ *indica*



5: Went ashore today about  
10 AM. Lost shot gun in  
heavy surf on account of  
boat capsizing. Shot  
B. flightless cormorant.  
Many seen in water &  
also on land basking their  
sides in sun. In sun  
taken specimens. From  
condition of wings & testes  
the breeding season is long  
passed; no eggs seen.  
Spheniscus abundant.  
Puffinus. Sula melan-  
cephala on cliffs. A small  
Thalassidroma seen, entirely black  
no red gular sac. Pterodroma  
common on land, many  
seen but none secured.  
Butorides plumbeus common  
also the white. Several

Leucosticte gracilis seen near  
shore. Larus fuliginosus  
seen, seems darker than  
those observed at Lyman  
Cove. Several Boaters seen  
on rock in fine beach.  
Puffinus puffinus  
abundant on rocks.  
Two shot, also shot one  
Sula melanophis. And  
billed Sula seen flying  
over boat, one observed  
on land. Puffinus  
seen, whole island  
covered with very small  
Larus scopula, birds of storm  
seen between.  
Went ashore to look for  
Puffinus & a few  
other high, but none  
seen.



mountain. Climbed to  
summit and found an  
crater, only a large ridge,  
a fissure from which the  
lava had flowed, still lay out  
covered with long grass in  
which were many small  
mounds, here and there  
appeared tiny second craters  
by water rising along with  
everywhere. The large cracks  
& faults running through  
the river of lava were here  
and there places were high and  
smooth lava as if very recent.  
Reptiles abundant.  
No birds everywhere from  
beach to summit. Saw a  
small black bird near summit  
which looked different from  
others. Two small snakes

seen, one seemed past skin  
of a larger one found. The  
land was everywhere where there  
was no vegetation, lived in  
throughout the light soil,  
in places only grass and  
mosses. Stomach examined  
was full of insects. I finally  
saw one on a bush  
5 ft up perhaps 10 ft from  
me grabbed it. It was a  
thick and thin but I don't  
know it. The common  
bird was *Myiophobus* from  
beach to summit,  
in full song, nearly as  
abundant as the birds  
& just as tame coming  
within a few feet. There  
were also *Geopelia striata*



a small filled specimen seen  
low down, one observed on  
branch sitting on a branch  
picking around it. The  
The reptiles did not seem  
to notice the birds. A  
large billed black ibis  
fairly common, about 10 seen.  
A very large black ibis  
specimen taken, only one taken  
but a couple seen. A  
*Carenum hyacinthi* variegated  
taken, a few others seen.  
A *Megascops* taken, many  
seen. *Amegilla* taken, about  
two others seen. No doubt  
a *Certhia* seen. Vegetation  
scanty even where there  
was soil. A leafhopper  
similar to the one we saw  
at Laguna comestible was

seen, big, thick branches.  
None seen with leaves, these  
were white bark & common  
orange tree, I just then seen  
some about 1 ft in diameter &  
1 ft high. A composite, with  
white flowers & stippled  
leaves very common.  
A shrubby bush  
with long green grass blades  
half climbing very common.  
A few yellowish orange  
in some, in some, I just  
taken a few. Solanum in flower  
fairly common. A few  
fairly common, black, yellow  
leaves, some with little  
gray. A few in the bush  
I just then taken. A few  
in some, in some, I just  
taken a few.



7: Lay in Barts Bay all day, mostly calm. Left went sailing along shore while we remained skinning the birds shot yesterday. Saw 2 Cormorants on shore of Barts Bay. Also many Scaup. Murrelets, 2 seen. One Red-tailed Gull flying over the ship when off the shore. A number of gulls were also around us. Albatrosses, Bonaparte's Puffins common. The Mountains look better wooded than last night. Very few lava steams with sides covered with snow. A very barren field of Scirpus luteus seen. The water is not so cold as north of the

One, very little vegetation seen on this. Not enough to cover with a success of lava flows several feet thick soil extremely rough and sharp the vegetation breaking down or fusing with lava by section flows. Some of the hot holes have very deep water containing brown water. Several mangrove swamps just north of the hills. They are that formerly were a bushland or similar. At they were all covered with a very young forest. The islands with a very few trees. The Red-tailed Gulls killed the birds & were very much



73

Jan

then attack. One would  
pick the bird in the rump and  
as he flew he would try to  
the other would seize his leg.  
A brute disabled by such  
was soon overwhelmed  
hungry eagles. When the  
men stood by with guns  
shot them. The scheme  
was to put upon a double  
on the island & by shooting  
the wild birds breed the other  
ing but the fall in wool  
ruined the whole scheme  
during the first year.  
Two dogs seen on Maske  
yesterday by the men.  
A. M. de T. de T. de T. de T.  
... ..  
... ..  
... ..  
... ..  
... ..

arrived between Harbrough  
 Albemarle. Saw a flying  
 fish about a foot long  
 under a 200 yard ship  
 on the water. He kept  
 anchor about 200 yards  
 beyond shore.  
 When beginning to  
 breakfast but appetite  
 did not work, found  
 it got with some  
 very strong fish, & so  
 on. Went out to the  
 water hole after breakfast  
 shot a great many small  
 Georgia & only one big  
 large black one. Bird  
 worked a boat with the  
 water hole. Bird  
 blackish. Shot a few  
 on several occasions.



Aug. saw some large birds  
 probably martins on the cliffs  
 near water hole, Sula Nebou  
 abundant on cliffs. Penguins  
 everywhere, also Palom  
 Frigate birds, also many  
 seen on cliffs. In water  
 seen. Euphorbia very  
 abundant, hundreds on  
 water, C. f. very common  
 Buts. & L. very common,  
 I saw several small birds  
 black & white on cliffs.  
 I procured none, Achras  
 bush with large pods  
 common in hills, Euphorbia  
 scattered along cliffs, also  
 several further inland.  
 10 W. and L. abundant in water  
 today after rain outside

Jan

I went to Cove where we  
 shot a blue long finned  
 scaled fish such as seen  
 in the lake & a fish with yellow  
 scaled fins & lips & eyes  
 & a large fish, but not shot, I saw  
 one just south of Bonts  
 bay. I shot about 50 fish  
 the first shot 7 species of  
 all blue toothed, one with  
 a spot of yellow on the fin  
 with small ones on the fin, dark  
 one yellow, scales yellow  
 & small fish like a sea bream  
 many red small scaled  
 fishes, also blue long finned  
 & a large fish with fine brush scales  
 small brown fish with long scales  
 the yellow & blue of the scales  
 common in the lake, I shot  
 a black & white one on the



where a large mangrove  
swamp lay about 200  
yards back of beach, Feb 1. 1891.  
4 *Pyrocephalus*, 1 *Chondestes*.  
91 *Megascops*, birds not com.  
in evening. heard a rail or  
gallinule calling. Two  
species of the sparrow in the  
the mangrove where the long  
J. is hanging from its  
branches. One with small  
eyebrow, <sup>white</sup> plumage black only  
birds lower black with some  
Many succinea seen  
on cliff when we began to  
go in the chitla in <sup>the</sup> morning.  
1110 and they were in the gage.  
This am. south of the line.  
First shot brought up many  
Red cherry head on the 1st of the  
green yellow spotted. Some

shot about 1 1/2 ft long in  
the air when we shot.  
The same afternoon *Mystic*  
a blue light spotted fish  
1 ft long. Many red  
fish about small brown ones  
seen. A next day  
here we began to see  
a transparent fish  
fish, also a small white  
fish like the fish. Not  
up to the same number  
yellowish. After a time  
we began to find  
several large *Pyrocephalus*  
above this place. Some  
many of the spotted fish  
seen. A small fish  
a fish, a fish, a fish, a fish  
a fish, a fish, a fish, a fish  
a fish, a fish, a fish, a fish  
a fish, a fish, a fish, a fish



Coyotes caught several  
white fish off water. But  
after a large chachau was  
caught off shore. I  
had a squirrel, and a trunk  
of a fish a great deal of  
which had been a seal house in  
the stomach. Kays & fish  
as we have seen none. The  
ones of these had smaller  
than others. I kept looking  
at the + made measurements.  
Shot 4 of the snappers off  
cliff, teeth long, as in the  
stomach, probably were  
mostly deer. I saw a few  
small birds in the  
cave.

12: Started out in the cave  
for the hills back of the cave  
Vegetation rather scrubby & dry.

was very open, plus acacia  
& leafless bushes. Birds not  
common. Small geese  
common, also large birds like  
the ones on Sanborn's point  
beautiful. After lunch  
I examined taken. Several  
others seen & one the taken  
in canyon side. Found a little  
hole in canyon slope  
leading straight a large  
mouse seen at night.  
Found a dried mouse near  
which had head for food  
at night. No fresh mouse  
also seen. Think they have  
migrated into the mountains  
from the canyon. I saw  
a small deer in the canyon.  
The stomach contained  
large quantities.



No certhidean flycatchers  
seen. Many old turtle  
gills found but no tracks  
or fresh signs. They probably  
only come down in spring  
like the mules. Poplars  
abundant everywhere.

13 Started for Westport  
for a 3 days stay. In the  
opposite there is a large  
mangrove swamp. Only  
tops of trees seen as it was  
high tide. Shags, King  
birds, Phalaropes, etc.  
Slender-bills abundant in  
the swamp & the Butorides.  
Some sandpipers, a turnstone  
& sandpiper. Shags, etc.  
Chytrich catchers. Found  
14. Also some meadow larks  
at 1/2. The water is very

low. A few  
small ~~black~~  
birds seen. A large  
white-headed Albatross shot  
at outside.

14 Departed at 10  
this morning. Secured  
several new fish. Most of  
them different from those  
seen before. A goldeneye  
seen. The water is very  
high. A quick stream, also a  
trifling. Several species of salmon  
seen. Many of the salmon  
are a trout, etc. etc. etc.  
abundant. A large  
white-headed Albatross shot  
at. A large salmon  
seen. Size of a trout but  
wide. Stomach contained  
small fish & crustaceans.

coronatus contained ~~live~~  
fish also. Vegetation very  
scanty, only a banner  
flower back of mangrove.  
Saw the small <sup>Cyllindropuntia</sup> ~~Adiantum~~ <sup>yellow</sup>  
like the one taken at Pt. Christy.  
Mangrove in the river & dock  
also false mangrove quite com.  
15' Went down the coast  
half way to Pt. Mangrove  
& found a fine large  
swamp not accessible to a  
boat. Many fair seals on  
the reef, pups of all sizes  
a bunch. Found one  
adult pup lying beside a  
cow. Saw two pups, one  
one cow, one two pups, & the  
largest & biggest of cows. A  
a pup cow. The sea was  
blue & biller saw a few

other which kept up  
all night. Some  
contained many birds, small  
small rail seen & taken,  
a storm's taken. 1 Cestridae,  
another seen, Bledius, sea  
Pentodon, & small black  
crayfish, 1 Presomimus,  
1 fish, & a small plant  
abundant. Mollusc common  
beach, many, pecten, planor-  
bica, etc. Some small  
shells of pecten found in  
water when water was  
retreated. Butter common,  
a few slight pecten,  
Dumetia on rocks, some  
large, some small, with  
a large group of a  
uniflorous which  
with the water



just below black light.  
School chased by a shag.  
Set 16 traps this evening  
at end of line. Saw 7 dead  
hens on lake.

17. Caught no mice but  
saw a few along the shore  
and some in the  
jelly nearby. Shot 4 ducks  
on the lake, one in the  
water, 3 on shore, and down  
at about 100 yds. from the  
shore. The lake is very  
shallow, the water is very  
dark and muddy. In  
a few places willow  
stems are visible. Castles  
are common about hills, at  
edge of lake a great many  
fish, also *Amegacinctus* has

18. Caught 4 mice at lake  
one, 3 large 33 + 1 yd. 8. No other  
sp. young, seen no other  
rodents. Visited a small lake  
higher, saw a large white  
fox, a little smaller than the  
one seen there, few small  
foxes.

Caught 2 mice today  
lake shore, one of each  
species. No foxes there  
any, few mice at lake.  
Edges this morning.  
Caught many, foxes  
seen, 2 red asters, and  
one red aster, caught  
pair of fish, two more seen  
but not caught. The lake

is very shallow, the water is  
very dark and muddy. In  
a few places willow  
stems are visible. Castles  
are common about hills, at  
edge of lake a great many  
fish, also *Amegacinctus* has

shell abundant, some  
Crepidula, commoner than  
was killed, some Bulla  
littoralis, some vermiculata &  
thracia, <sup>small</sup> shells some  
Hydrobia with some cone, Carya  
also some a few large lifeless  
large fish bones, the fish  
bones of large brown, some dark  
green & 1 large spotted fish  
26. Caught 2 rats at home &  
1 rat from water hole,  
Caught another geyser, with  
large teeth, large head  
Drove a little up the lake &  
caught. I could not find  
signs of any burrows or  
Went to lake below the  
cone this morning. I could  
expect secured but a few of  
white objects in water.

all islands, shells of the  
two Human tops,  
vicinus, some large  
Cicula & E. fuliginosa  
stercora common about  
the shore. Shot 12 small fish  
back in lake, some large  
large green, white & gold  
smaller, also found up  
king of center where  
with some other fish  
fish in there lake a large  
one blocked up the  
stream & kept a large  
is of center about 200 ft.  
common lower part of  
lake from a large fish about  
40 ft high, small islands  
center. A large one  
with a little of grass, just  
above center of lake.



Wale quite barren, about  
8 ft deep 15 ft off shore. The  
inner edge of the beach  
(15) outer about 200

House, large Baiter, very  
on Lavalon built a big  
project, back of lawn, and  
Lavalon old about 1840.

at base, depression on top  
the shallow, low ridge  
a nest. The one looks  
though it was once  
at the S.E. rim was  
very low by way of the  
one of the same. Both  
had hollowed holes  
very much lower at  
base of the nest.

Perennial herb. Leaves  
 shiny black. Bright blue  
 flowers. 2 or 3 in  
 raceme. Abundant  
 in the wet fields.





nesting, 3 *Pyrocephalus*  
taken, 1 *Coccyzus* & one the  
same. No birds seen above  
the swamp. A very few  
saw for & one I saw  
there at a point nearby.  
27<sup>th</sup> Feb. for a point  
nearborough for a short  
large stay. Took traps  
along but found no  
place to set them. Put in  
most of time in the  
swampy swamps, where  
on the low fields from  
the mountain which  
made it inaccessible from  
the coast. Saw two  
*Coccyzus* & a few more  
sawed, but several  
small brown jays which  
had a fuliginous lustre to

black plumage. They were  
with them & fed about the  
jays as sitting on their  
beak and feeding at insects,  
saw many quite common  
but shot bills with a  
red & brown cast to the  
wings, also a few common  
everywhere, I saw a *Coccyzus*  
but not taken, also  
white winged & white  
bills, also *Limosa*  
in with them. A sharp  
shiny bird that was  
very common. Heard to go  
pairs of *Phalaropus*. Some *Phalaropus*  
were seen elsewhere.  
Some ducks flying  
about. A red-bellied  
goose. This morning  
my horse with





Love at 6 AM on 4/17, this  
 beach below B&C 13 light  
 about noon, rough sea,  
 Shot about 15 ducks in  
 crowing, 2 eggs, 2 adults,  
 the hollow song quite  
 distant from shore.  
 Long bright light in  
 morning, there were some  
 with feathers, etc.  
 with that, some water, took  
 a swallows nest with water  
 in it, also eggs, etc. near  
 at the back of the beach. Saw  
 several old nests of birds  
 about 25 ft up in the trees  
 ropes were like the  
 nest, the birds, etc.  
 Eulalia, etc. Also  
 the birds, etc.

from bushes, I saw 6 thick  
billed mergansers & a few  
small bill divers. Noticed  
the small foragers were  
back & forth with the tide  
gathering food about the  
tide marks. Some of the  
foragers were at the  
concrete jetty & some  
were feeding at the  
same place. Found an  
old nest of Pigeons in holes  
on high cliffs about 100  
miles back from the  
island in a bad  
condition. Saw a dog  
on hill just west of  
salt lake house. It  
barked at us for several  
hours this evening.

For I wish a walk to the beach.

and a Shag rookery near  
the end of Bigg's Bay.  
They were nesting, but  
in small sets of 3+. The  
shags had 2 white black eggs  
+ 1 egg + last 1 egg + 2 eggs,  
+ 1 ♂ + 1 ♀ were present  
sitting with ♂ standing  
guarding the nest.  
They would not leave  
the nest on the egg, but  
a little hissing loudly.  
The built on flange  
was about 2 1/2 ft  
high & 1 ft wide  
for a depth of 1 ft. Shags  
are light colored on butt  
may be different from  
the rough & fine, but  
many birds were, about  
all birds. Shag rookery.



[illegible]

Feb 99

leaves in action, the  
 quantity of side of water  
 the amount of one & more  
 of the water. Long  
 1. Long  $3\frac{1}{2}$  ft. breadth  $2\frac{1}{2}$  ft.  
 1  $\frac{1}{2}$  ft. - Measure of  
 water found in the  
 of the water. Long  
 Went on shore in P.M. &  
 arrived at the of 100 ft.  
 the ground was 2 ft.  
 into the water. The  
 water was from 100 ft.  
 the land and was some  
 near.

January 11 - Started on my  
outing for top of Mt.  
Winds not a hard climb,  
at least a small  
one. Found the top of Mt. W.  
at 1500 ft. - 2000 ft. (Only  
found one or two small

crater were *Pygmaea* & *Myrica*.  
+ *Sesuvium* seen at 3000 ft.  
Several *Myrica* seen  
growing. Saw several *Butter*  
dk. phase. Distribution of  
vegetation on wet ground  
different than at  
Saguan Lake. Humid  
area begins at about 1500 ft.  
Both species of *Cactus*, *Opuntia*  
*Cylindropuntia* found along the top.  
Very abundant at  
3000 ft on lava slope. *Opuntia*  
large *gambelii* like + there  
at Saguan Lake, small at  
base of Mt. Ararat. *Cylindropuntia* very  
large. White cone for  
which are even but they  
have grown into trees at  
highest at 1500 ft to top.

101

Feb

The diaphanous, creeping trees  
grow from base to 500 ft.  
A few plants found  
from base to summit,  
at least 6 species *Cactaceae*  
growing to 2000 ft. *Ferns*  
are common. *Polypodium*  
grows at 1000 ft. *Pygmaea*  
continues nearly to summit.  
A few *Adiantum* in  
moist shaded conditions.  
Top of mountain covered  
with dense growth of *Opuntia*  
pass about 15 ft high, this  
same grass found on side down  
to 1500 ft. The top in which  
the grass are found white  
mossy bushes. *Opuntia*  
at base of Mt. Ararat. *Opuntia*  
found on top side  
about 1500 ft high. 5 mi across.



bottom level, flat cracked  
lava, one terrace about 100 ft  
high, walls not vertical  
made up of blocks from  
laid first like cliffs at  
Mesa. Think mesa  
is rim of a crater. The  
slopes on sides are bare.  
There is several little pools,  
one found, which is in  
a hollow at base of slope. Dolomite  
like along edge of rim, but  
back not much eroded.  
Today along rim, side  
glacier some far up on side.  
Big with some in grass  
on top. Little seemed  
much frightened & still  
much excited, chattered in  
back. *Cuckilla atkinsoni*  
on grass & some on wall.

Species of *Simulium* & common  
them. I felt. Several species of  
insects found on rock, sides  
of hollows on north side.  
Four lizard seen, one taken  
same collection as the  
one. Not measured.  
The barometer 8,450 ft.  
Remained on ground  
during storming, but  
remained without much  
and much motion which  
occurred on bottom.  
I caught a *Scorophagus*  
which I saw earlier. I  
got it under a rock.  
I went back to tent, taking  
a kind of tin from the  
bottle. No more insects  
seen. I took the  
chicken & some on the

Longhorn larvae killed  
commission, no response,  
saw, several butterflies  
collected a species of dragon  
fly to be sent. The  
full grown, water  
fly was then sent about  
intermediate between it  
& J. R. spectrum, from  
in which section there are  
longer & paler streaks full  
of spines. When seen from  
below it was quite  
resembling, indeed, when  
turned it righted itself by  
picking its legs all in pairs  
breast & turning round  
on its back. Then by lifting  
the middle of joints it  
passed its hands with the  
other and its feet to

105

Tels

which appeared then  
to be legs again, so  
that it was a half an  
hour to turn over. On  
the surface above, the  
probably of the  
from the dorsal  
surface when found it  
was in a walled section  
large basins. Then  
which showed it from  
the side. They seem to  
be shade & imitations,  
this one was a T, jaws about  
line, long pointed like a  
shagreen barrel. The first  
which hollowed, probably  
by some insect to which  
shell of the & is capable  
of a large amount of  
in both used wings



entirely, but appears  
to be held back under the  
sand dunes in the valley.  
4/1 Went after teeth at  
the river & saw a fine  
one about 1/2 inch in width  
and 1/4 inch in height, thin  
dips at 100 ft on mountain  
side overlaid mostly a soft  
in canons. Saw some  
smaller teeth in ridges seen  
from bridge to 100 ft.  
The teeth are mostly  
continuous with one  
one but the whole group  
varies beneath the flow  
at least 100 ft. 1/2 inch  
width of the teeth.  
Saw a small specimen  
about 1/4 inch wide,  
5: - Dined back part.

Went about noon, Angles  
large bedded chert. Saw  
a few specimens.  
Saw a specimen along  
with the flow, but the  
new to the collection in  
valley was about 100 ft  
to get away of them. The  
new stone is side of some  
upland near the river  
and about 100 ft long  
the stone is  
1/2 inch long, rich brown  
with little spots of length  
to 1/2 inch. Saw a large  
shell of some small  
crayfish near the  
river. Perhaps this  
Chirobates. The  
stone is about 100 ft  
long and 1/2 inch

specimens yet taken.  
 at Bideford, a large  
 Frank's mackerel  
 taken on the beach  
 at Bideford, West  
 of the mouth of the  
 Coughlin River.  
 Most large, some 5 or 6 feet  
 long, and some 10 or 12  
 inches deep. The  
 color is brown, the  
 sides silver, the  
 head brown, the  
 eyes black, the  
 mouth black, the  
 gills red, the  
 scales silver. Collected  
 by the fisherman  
 of Bideford, and the  
 ground fish, but could  
 not spare the time.



crabs & shrimp, shells,  
bills, etc. A elongate  
much flattened shrimp  
with bottom of carapace  
from about  $\frac{1}{2}$  inch to  $\frac{3}{4}$  inch  
length at 10-20 specimens,  
dinner third of bottom the  
pale, but by course  
not so much as the whole.  
Found a few small shells  
of various sizes & shapes  
showing that the best  
originally lived in shells  
which latter were always  
in an even row with the  
leaves the back of the  
spine in the middle of the  
side, the back first grayish  
like shells, then brown  
in some of the group brown  
cardinal & dark brown at

London finches which  
were collected in the  
clearing its hole in  
a great live tree.  
Many sand dollars  
Laguncula & Pentalia  
wedged in sand  $\frac{1}{4}$  of Cove.  
Found a lot of small  
sand near back of Cove  
collected 11 in 3 hauls on  
dark sand, mostly very  
small about  $\frac{1}{2}$  inch long  
the long Medusa-like  
11 kept on about 3 P.M. for  
Elizabeth Bay. The amphipods  
collected found to be allied  
to Branchiostoma elongata  
of Perce. The myctophids are  
more seventy, tail with 7-12  
to 12-16, body 42-50.  
got 20 mm. Capt. says

that last year he saw the  
Penguin at McMurdo  
Agassiz says no evidence  
either submergence or  
elevation on islands. Just  
north of <sup>Long Hill</sup> Lake a steep cliff  
enters into sea about 90 ft  
high, 200 yds. back about  
1/4 mile inland showing  
evidence of a connection as  
that just now on shore, a  
yellow clay floor has  
run into sea at its foot  
stretching off eastern 1/2  
10: Calm, remained all night  
just south of Cape  
Elizabeth Bay but  
became calm and no  
exchange can be made  
Saw a Snowy Plover flying  
a little in the morning.

the red-tailed Booby seen. The  
point North of E. Bay was  
covered with a fair amount of  
vegetation to the beach no  
Carriacou flows visible.  
The vegetation was dry,  
mostly pale green to brown etc.  
A heavy timber forest  
covered the N.W. coast of  
the bay, forested & short thickening  
along the shore. In the S.W.  
corner, & including, I saw  
all kinds of trees on  
the slope.

11 Ran close along shore in  
not gain anchorage but  
found some, *Sula nebouxi*,  
*Pelecanus*, *Corvus*, *Puffinus*,  
*Oceanites* abundant. *Mangrove*  
has appeared to be in  
blossom, very little vegetation.



on the lava flows. In evening  
could see the crater crater  
nicely with a glass. Only two  
visible, close together with  
slight rim, two fissures, one  
in & below them. Like lavas.  
Steam issued in great volume  
a surging mass of lava flow  
up & dropped back in crater  
continually. A streak of  
luminous clouds reached  
from crater down mt. side  
to near sea, perhaps made  
by a burning lava flow which  
was hidden by a ridge.

12:15. Fog near the bay all day.  
Thunder showers have ceased  
but not all haze clearing  
all the mountain, only  
shore line visible. Anchored  
off west side of bay in 14 fms.

white coral sand bottom.  
Took up several *Paralabrax*  
*humeralis* at anchorage. Saw  
another Del. like Goshly fly  
by the vessel.

12:30. Went ashore near  
anchorage. Large coral sand  
beach on seaward. Shore  
low, made up of fairly  
smooth lava flows in  
patches covered with stunted  
vegetation. Prickly green  
bush most abundant.  
Particular wh. fl. bush very  
abundant, *Castilleja* &  
*Mattheria* rare. *Alpinia*  
abundant, some with  
large fruit, two birds found  
on it. Long spindly  
plant, now in bloom.  
A species *Cereus*, small

x giant corn. Patches of  
 vegetation limited to  
 ash covered spots, where the  
 lava is crilled with small  
 holes, out of which fine ashes  
 were blown, soil rich, in  
 rainy season ground covered  
 with moss, *Molluscs*  
 common on bare lava  
 were black, *Gnathypus*  
 at a distance, *Paludicola*  
 occasional. In places  
 salt ponds with rustles,  
 grass & salt grass, *Cyperus*  
 large on shore of ponds,  
 sea purslane, *Desmanthus*  
 abundant, in flowering in  
 ponds. Land birds rare,  
*Protonotaria* only seen  
 inland, shot 9, *Helminthophila*  
 found about mangroves,

In one salt pond shot 3  
*Flamingos*, 2 were molting  
 but no primary, secondaries  
 wing, coverts, Saw a *Gallinula*  
*gambata* in same pond, also  
 eight *Gallinula* *clonetta*. In  
 mangroves took 1st,  
*Butorides* with 4, Saw 1st  
 It up to with *Butorides*  
 sitting on rocks near shore,  
 the eulder seen but  
 too wild to be taken.  
*Protonotaria* common along  
 shore, rarer inland. *Pro*  
*Georgina* seen, nor were  
 there any evidences, as  
 yet, that they ever  
 occur here.

Went ashore in P.M., at  
 the place we landed  
 at 5 P.M. No *Gallinula*



seen. Saw several states  
of 2 species at mouth of  
Mangrove Swamp. Saw  
several of the yellow spotted  
black fish also. Last evening  
clouds cleared away &  
showed my west side of  
Mt. Flaming, whole slope  
appeared fissured from  
which first stream was  
issuing, no lava stream  
visible. Fissures extend  
to base of mt.

\* From Ridge group arrange-  
ment of sp. by bill I construct  
the above tree making a  
Mangrove form, Camarophyllus  
pallidus the species near  
the original fringilliden  
ancestor because mangrove  
were probably the 1st vegetation

*G. acutirostris*

20

19

18

17

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*G. bairdingi*

*G. intermedia*

*G. leucurus*

*C. acutirostris*

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1

*C. pallidus*

*C. pallidus*



that supported birds & the  
1st species to arrive would  
live in mangrove swamps.  
The series is not without  
breaks & maybe entirely  
wrong although it appears  
that the two genera came  
from a common ancestor.  
There may be species on Coco  
Island which approaches  
nearer the ancestral form  
or some that fills up the  
breaks. The Hawaiian Islands  
may show some connection  
or related groups.

Albemarle being the <sup>highest</sup>  
& largest & supposed therefore to  
be the oldest island would  
contain the ancestral forms  
provided they have not become  
extinct & been replaced or

12/  
Feb 14

immigrated to other islands.  
In Oresomius there is a  
gradual evolution in species  
beginning with the form on  
Albemarle & ending with  
the Hood Is. form. This  
is supposing the evolution  
proceeded from the smallest  
billed form & went toward the  
larger, it may have been  
the reverse or it may  
begin in the middle of the  
series & proceed both ways.  
This can always be determined  
by 1st finding the nearest  
allied species from main  
or other island groups &  
entering this as an ancestral  
form & working up to the  
specialized forms.



longer thejums, shorter than *Germs*.

60 *Strong Ray* two spines, *Germs* D

61 *Evojlites viridis*

62 *Caranx caballus*

63 *Chaetodon* near *nigricinctus*

64 *Ofisthoneura libertate*



- 39 *Scarus* sp  
 40 *Archosargus foveolatus*  
 41 *Eupomacentrus* sp  
 42 *Abudefduf* (near *saxatilis*)  
 43 *Myxaluna* (near this genus)  
 44 *Anisotremus interruptus*  
 45 " near *scapularis*  
 46 *Sciaenops ocellatus*  
 47 *Calamus taurinus*  
 48 *Neomacris* (near *calorados*)  
 49 *Sphæroides annulatus*  
 50 *Chilomycterus*  
 51 *Antennarius*, near *tigris*,  
 52 *Branchiostoma* (near *elongata*)  
 53 *Harpe eschscheri*  
 54 *Eucirostomus*  
 55 *Scorpaenopsis* (8 dor. sp)  
 56 *Scleromatalepis* sp  
 57 *Holocentrus ruber*  
 58 *Sphyræna* sp  
 59 *Thunnus* sp - 70 pectoral

- 62 *Paramythia pacifica* - Red.  
 63 *Sebastes* sp, near *syris*, prof. dif.  
 64 *Stenobanchus* *rozema*?  
 65 *Cratius agassizii*  
 66 *Paralabrax humeralis*  
 67 *Hiodon halacanthus*?  
 68 *Scorpaenopsis maculata*  
 More rows of spots,  
 Coloration & scale counts diff.  
 69 *Carolatus princeps*  
 70 *Platyphrys constellatus*?  
 Maxilla shorter, coloration diff.  
 71 *Syngnathus*  
 72 *Holocanthus fassler*  
 73 *Pinnulobutyrus lasivittus*  
 74 *Desmionus punctatus*?  
 75 *Rugosities atlanticus*?  
 76 *Merluccius* sp in dome  
 77 *Merluccius insularum*  
 78 *Halargyreus*, near *gillii*  
 79 *Mugil thoburni*



- 1 Characanthus sp
- 2 Halocypselus volans (?) (Ellis) Peckham
- 3 Exochus volitans
- 4 Thynnus thynnus
- 5 Robins saporator
- 6 Oroides setosus
- 7 Pachynathus sp
- 8 Ostraciidae (Genus not given)
- 9 Harpe diglossina (?) And sp 4
- 10 Zenthis aliala
- 11 Epinephelus labriformis
- 12 Zenthis triostegus
- 13 Euleptorhynchus sp (List)
- 14 Nomenus, coloratus (Hypsalia) sp
- 15 Mola mola
- 16 Coryphaena hippurus (?)
- 17 Remora remora
- 18 Mycteroperca olfax
- 19 (yellow) nympha
- 20 Syngnathus fuscus
- 21 Pontinus sp

- 53 18 Anous } Clapper
- 57 12 Sturna } Clapper
- 18 59 Sturna
- 5 12 Campylorhynchus } Clapper
- 15 7 Heteractis } Clapper
- 18 24 Mesomachus } Clapper
- 18 32 Ave } Clapper
- 23 78 Berytus } Clapper
- 23 27 Certhia } Clapper
- 23 28 Mesomachus 4
- 18 Procelia 1
- 27 Certhia 2
- 53 72 Berytus 12
- 15 12 Berytus 2
- 4 110 52 B. callos.
- 1 a 3 - 0
- 1 11 - 18

11490. Hermatylus sp.  
 minor quatuordecim, florid, albid, big  
 3. 11491. Hermatylus sp.  
 11492. Pachynathus cafishtratus  
 11493. Holocentrus ruber